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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------|
| 10/648,164 | 08/26/2003 | Larry D. Kinsman | 3396.8US (97-0696.08/US) | 3536 |
| 24247 | 7590 | 03/13/2006 | EXAMINER | |
| TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110 | | | TRAN, TAN N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2826 | |

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/648,164 | KINSMAN ET AL. | |
| | Examiner | Art Unit | |
| | TAN N. TRAN | 2826 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on amendment filed 12/23/05.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) 7,8,12,13,17,18,22 and 23 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,9-11,14-16,19-21 and 24 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Minhloan Tran
Minhloan Tran
Primary Examiner
Art Unit 2826

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 12/23/05.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. Applicant's communication filed on 12/23/05 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejections of record and those rejections are accordingly withdrawn. In view of a further search, however, a new rejection is set forth further below. This action is not made final.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an alignment device with at least one receptacle formed therein; and at least one semiconductor device assembly including a mounting element with a receptacle as recited in claim 1, and receptacle of the mounting element as recited in claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6,9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2,3, “an alignment device with at least one receptacle formed therein; and at least one semiconductor device assembly including a mounting element with a receptacle” is unclear as to whether it is being referred to an alignment device with a first receptacle formed therein; and at least one semiconductor device assembly including a mounting element with the first receptacle.

In claim 9, line 2, “receptacle of the mounting element” is unclear as to whether it is being referred to a second receptacle of the mounting element.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,10,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (5,244,403).

With regard to claims 1,10, Smith et al. discloses device comprising an alignment device 18 with at least one receptacle 17 formed therein; at least one memory device 70 serves as a semiconductor device wherein the memory device 70 assembly including a opening 23; the opening 23 serves as a mounting element with receptacle 17 configured to receive at least a portion of at least one memory device 70 in nonparallel orientation relative to a carrier substrate 80. (Note fig. 1 of Smith et al.).

With regard to claim 2, Smith et al. discloses the at least one memory device 70 includes at least one contact 75 adjacent a single edge thereof. (Note fig. 2 of Smith et al.).

With regard to claim 3, Smith et al. discloses device the alignment device comprises at least one contact 13 located so as to be aligned with the at least one contact 75 of the at least one memory device 70 upon interconnection thereof with the alignment device. (Note fig. 2 of Smith et al.).

With regard to claim 4, Smith et al. discloses upon interconnection of the at least one memory device 70 with the alignment device, the at least one contact 13 of the alignment device resiliently abuts the at least one contact 75 of the at least one memory device to establish an electrically conductive connection therebetween. (Note fig. 2 of Smith et al.).

With regard to claim 5, Smith et al. discloses at least one memory device comprises a semiconductor die and the at least one contact 75 comprises a bond pad of the semiconductor die. (Note fig. 2 of Smith et al.).

With regard to claims 6,11, Smith et al. discloses the alignment device 18 is configured to engage by the mounting element 23. (Note fig. 1 of Smith et al.).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 14-16,19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Perino et al. (6,007,357).

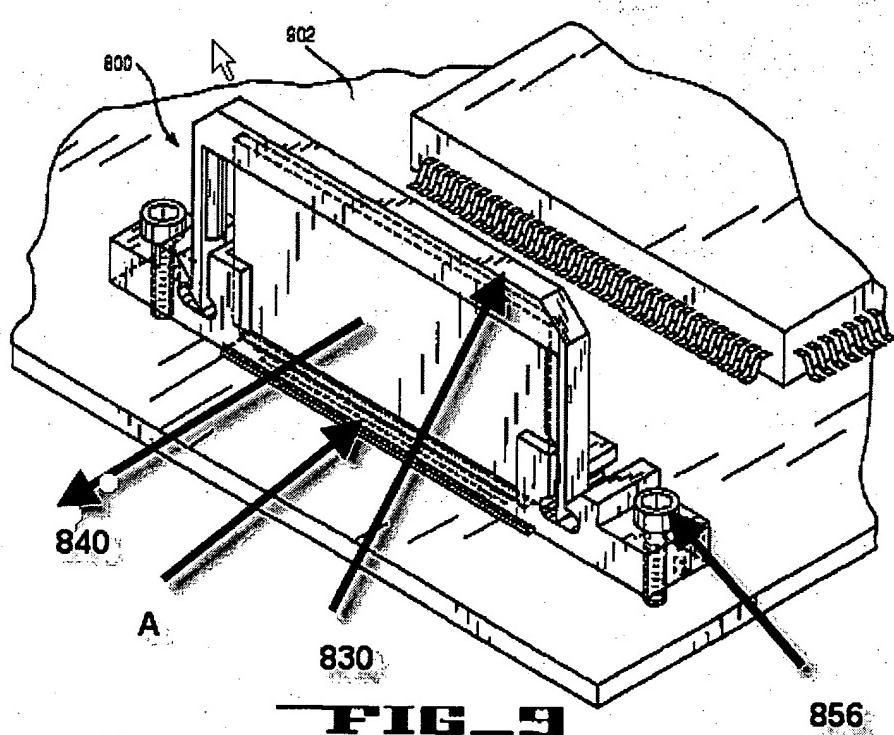
With regard to claim 14,21, Perino et al. discloses device comprising: at least one semiconductor device 840 including a plurality of contacts 842 located proximate a single edge of thereof; a retainer 830 including at least one receptacle configured to receive another edge of the at least one semiconductor device 840; and at least one mounting element 856 associated with the retainer 830 and configured to secure the at least one semiconductor 840 to a carrier 902. (Note see fig on page 6 of this office action, and figs. 8,9 of Perino et al.).

With regard to claims 15,19, Perino et al. discloses an alignment device A configured to be mounted to the carrier 902 wherein the alignment device A includes at least one receptacle configured to receive at least the single edge of the at least one semiconductor device 840. (Note see fig on page 6 of this office action, and figs. 8,9 of Perino et al.).

With regard to claim 16, Perino et al. discloses the alignment device A is configured to engage by the at least one mounting element 856. (Note see fig below, and figs. 8,9 of Perino et al.).

With regard to claim 20, it is inherent that Perino et al. discloses a plurality of contacts are positioned within the at least one receptacle so as to facilitate electrical connection with corresponding contacts 842 of the at least one semiconductor device 840 in order to secure the electrical connection between the semiconductor and alignment device.

With regard to claim 16, Perino et al. discloses the alignment device A is configured to engage by the at least one mounting element 856. (Note see fig below, and figs. 8,9 of Perino et al.).



Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perino et al. (6,007,357).

Perino et al. discloses all the claimed subject matter except for the at least one semiconductor device is within the at least one receptacle of the retainer with an adhesive material. However, it would have been obvious to one of ordinary skill in the art to form the at least one semiconductor device is secured within the at least one receptacle of the retainer with an adhesive material in order to secure the semiconductor device and reduce the damage of semiconductor device.

Allowable Subject Matter

6. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 9 is allowable over the prior art of record, because none of these references disclose or can be combined to yield the claimed invention such as the second receptacle of the

mounting element is configured to receive and secure an edge of the at least one semiconductor device as recited in claim 9.

Conclusion

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Tan Tran whose telephone number is (571) 272-1923. The examiner can normally be reached on M-F 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TT

Feb 2006